

WHAT IS CLAIMED IS:

1. An alternator comprising:

a rotor for forming north-seeking (N) and south-seeking (S) poles alternately about a rotational circumference; and

a stator comprising: a stator core surrounding said rotor; and a polyphase stator winding installed in said stator core, said stator core being formed with a number of slots extending axially at a predetermined pitch in a circumferential direction,

said polyphase stator winding comprising a number of winding portions in which long strands of wire are wound so as to alternately occupy an inner layer and an outer layer in a slot depth direction within said slots at intervals of a predetermined number of slots, said strands of wire folding back outside said slots at axial end surfaces of said stator core, and

said stator core being provided with an abutting portion extending axially such that said stator core becomes an annular shape by joining ends of said stator core at said abutting portion.

2. The alternator according to Claim 1 wherein said stator core is composed of arc-shaped divided core portions.

3. The alternator according to Claim 1 wherein said stator core has an inseparable, integral core back.

4. The alternator according to Claim 3 wherein only one said abutting portion is provided.

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5. The alternator according to Claim 4 wherein each of said stator core is formed with notch portions for reducing a pressing force in a direction which reduces a radius of curvature.
6. The alternator according to Claim 5 wherein said abutting portion is formed inside teeth.
7. The alternator according to Claim 6 wherein:
  - said stator core is provided with teeth having different circumferential width dimensions; and
  - said abutting portion is formed inside teeth having large circumferential width dimensions.
8. An alternator comprising:
  - a rotor alternately for forming north-seeking (N) and south-seeking (S) poles alternately about a rotational circumference; and
  - a stator comprising: a stator core surrounding said rotor; and a polyphase stator winding installed in said stator core, said stator core being formed with a number of slots extending axially at a predetermined pitch in a circumferential direction,
    - said polyphase stator winding comprising a number of winding portions in which long strands of wire are wound so as to alternately occupy an inner layer and an outer layer in a slot depth direction within said slots at intervals of a predetermined number of slots, said strands of wire folding back outside said

slots at axial end surfaces of said stator core, and

    said stator core comprising: an inner circumferential core portion provided with teeth on a side near said rotor, said teeth defining said slots; and an outer circumferential core portion fitted over an outer circumferential surface of said inner circumferential core portion.

9.     The alternator according to Claim 8 wherein said inner circumferential core portion is provided with an abutting portion such that said inner circumferential core portion becomes an annular shape by joining ends of said inner circumferential core portion at said abutting portion.

10.    The alternator according to Claim 9 wherein only one said abutting portions is provided.

11.    The alternator according to Claim 9 wherein said stator core is formed with notch portions for reducing a pressing force in a direction which reduces a radius of curvature.

12.    The alternator according to Claim 9 wherein said abutting portion is formed inside teeth.

13.    The alternator according to Claim 12 wherein: said inner circumferential core portion is provided with teeth having different circumferential width dimensions; and said abutting portion is formed inside teeth having large circumferential width dimensions.